



The Role of Brokers and Credit Aggregators

Nutrient Trading Symposium
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George Kelly
Chief Market Officer
Resource Environmental Solutions, LLC

About RES

Overview

- ✓ RES is the premier provider of ecological offset solutions in the US
- ✓ Founded 2007 /1998
- ✓ Operations throughout United States
- ✓ 110 mitigation sites permitted/in process
- ✓ Conservation easements protecting over 425 sites
- ✓ 32,000 restored wetland acres
- ✓ 165 miles of stream restoration
- ✓ Reduced over 240 tons of nutrients
- ✓ 8,000,000+ restorative stems installed
- ✓ Rehabilitated and preserved over 4,500 acres of endangered species habitats

Mission

Resource Environmental Solutions develops and supplies ecological offsets to help companies obtain required permits for unavoidable project-related impacts to wetlands, streams and habitats.

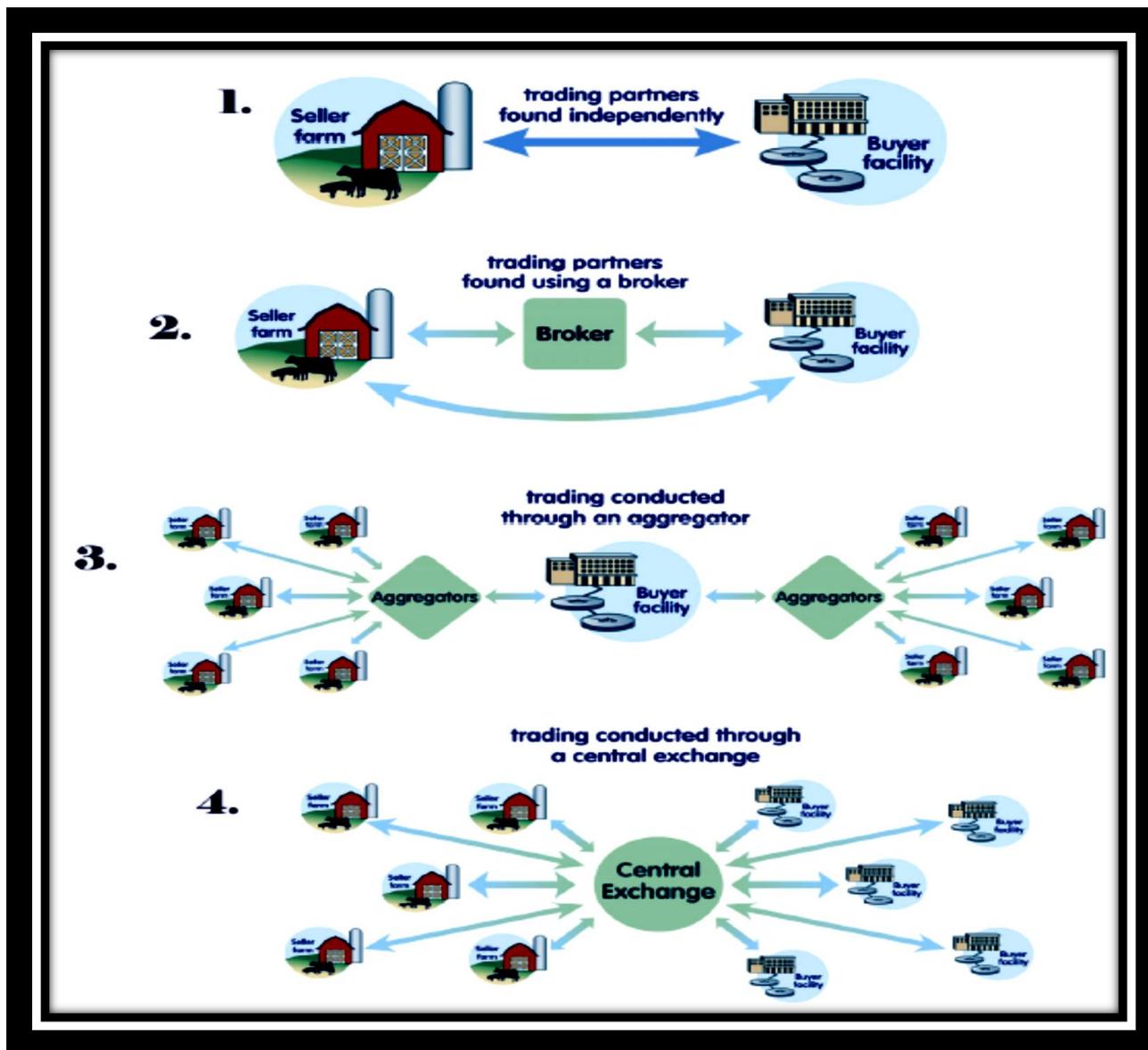
We help clients proactively manage risk from operations in environmentally sensitive areas by providing proactive project impact analyses, streamlining permitting processes, and limiting liability and regulatory exposure.



4 Types of Markets to Consider:

1. Annual Compliance for Existing WWTPs (BRF)
2. Credits for New or Expanded NPDES Discharges
 - 10 Year commitment to offset
3. Offsets for Stormwater (new growth)
 - Permanent solutions
4. MS4 (10 jurisdictions, including SHA-existing)
 - Permanent solutions/Cross-Sector trading
 - Restore an additional 20% of jurisdiction's impervious area currently not treated

Third Party Roles in Nutrient Trading



Role of the Aggregator

- Understand policies relating to aggregators
- Understand basic market factors
- Undertake baseline analysis on market and technical viability (including baseline calculations)
- Complete certification of credits
- Complete sales transaction
- Enter into trading contracts/regulatory approval interface
- Fund and manage the Project (including landowner payments)
- Assume and manage risk
- Manage diverse portfolio of credits (annual, structural, multiple farms)
- Integrate with other environmental markets and programs
- Insure the Projects (self or otherwise)

Market Examples-Stormwater Offsets

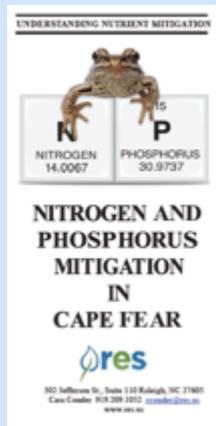
North Carolina

Satisfying Nitrogen and Phosphorus Control Regulations

Over 6 bank sites developed since 2008

Buyers

Retail, Developers, NCDOT



Virginia

Enabling Compliance with State Water Quality Control Laws- P

Over 3 banks developed since 2013

Buyers

VDOT, Retail, Municipalities, MS4 Owners



Maryland Nutrient Trading - Policy Background

July 1, 2005

- Chesapeake Bay Restoration Fund (BRF) - Flush tax becomes effective - 67 WWTPs upgrade

April 17, 2008

- Nutrient Cap and Trade: Point-Source to Point Source- Phase 1
- Examples: Retire septic and hook up to WWTP/retire WWTP

April, 2008

- “Draft” Guidelines for Generation of Agricultural Nonpoint Nutrient Credits-New or Expanded Discharges-Point-Source-to-Non-Point Source-Phase II
 - Nutrient Trading Tool at farm level
 - Baseline requirement in order to trade
 - MDA certifies, MDE places in permit

2012-2013

- Accounting for Growth Work Group Convened - Not Finalized
- Offsets for New Growth
- Gubernatorial Election occurred (Now “Alignment for Growth”)

October 23, 2015

- Maryland Water Quality Nutrient Trading Policy Statement:
- Cross-Sector Trading
- 3 Geographic service areas
- Private sector role
- Develop comprehensive trading policy

December 28, 2015

- MDA Draft Regulations for agricultural nutrient and sediment credit certification

Agricultural Nutrient and Sediment Credit Certification (Draft)

- Eligibility: meet baseline requirements
- Baseline: MNTT - NMP/SCWQP
- Not result in idling of whole or substantial portions of productive farmland
- Credit Generation: No cost-share unless extend beyond lifespan of practice
- Types of Practices: Category 1, 2 and 3 practices
- Lifespan of Credits
 - When generated: at time of installation and credit recognized in January 1 of following year
- Certification Process: Pre-Certification, certification and registration
- Annual verification and reporting: Verifier
- Trading Approval: MDE
- Trading Geographies (not addressed in regulations)
- Duration of Trades (not addressed in regulations/10 years for new and expanded)
- Enforcement

Accounting (now Alignment) for Growth Issues (Work Group-not finalized)

- Effective Date
- Threshold Trigger
- Pollutants (N, P and S)
- Stormwater Loading Factors (Post-Development)
- Pre vs. Post-Development Loads
- Permanency
- Timing of Offsets
- On-Site Pollution Reduction Practices
- Off-Site Pollution Reduction Practices
- Credit Certification, Verification and Transparency
- Regulations of Brokers and Aggregators
- Trading Geographies
- Fee-In-Lieu
- Credit Stacking
- Cross-Sector Trading (Urban/Agriculture)
- Trading Ratios

Conclusion

- MDA issued their new regulations for certifying agricultural offsets on December 28, 2015
- Maryland will develop a Comprehensive Water Quality Trading Document (will address Alignment for Growth, among other issues)
- A stakeholder group will be reconvened and will identify changes in guidance documents and/or the need for regulation or laws
- A final report is slated to be issued in Spring, 2016
- A conference will be held in mid-2016

Resource Environmental Solutions, LLC

<http://www.res.us>

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Oak Hill Pittsburgh Raleigh Richmond

